DIFFERENCE BETWEEN SG-500H AND SG-500E

REF. NO.	SG-500H PART NO.	SG-500H CODE	SG-500E PART NO.	SG-500E CODE	DESCRIPTION
T1	RTRNP0543AFZZ	BQ	RTRNP0548AFZZ	——	Main Power
T2	RTRNP0544AFZZ	AV	RTRNP0549AFZZ	——	Sub Power
T103	RCILI0209AFZZ	AH	RCILI0221AFZZ	AH	AM IF (H:455 kHz, E:465 kHz)
T105	RCILI0219AFZZ	AE	RCILI0220AFZZ	AE	AM IF (H:455 kHz, E:465 kHz)
CNS702	QCNCW149JAFZZ	AB	QCNCW0902AGZZ	AC	Socket, 9 Pin
F1	QFS-C402CAGNI	AE	QFS-C252CAGNI	AE	Fuse (H:4 AT, E:2.5 AT)
F2	QFS-C800CAGNI	AG	QFS-C400CAGNI	AH	Fuse (H:80 mAT, E:40 mAT)
SO1	QSOCE0557AFZZ	AP	Not Used	——	Voltage Selector
SO104	Not Used	——	QSOCZ2161AFZZ	AC	Socket, FM EXT. ANT. (75 ohms)
306	GCOVD3006AFSA	AA	Not Used	——	Cover, FM EXT. ANT. Socket
320	HINDM1219AFSA	**	HINDM1227AFSA	**	Decoration Plate, Model
358	LBSHC0004AGZZ	AC	LBSHC0004AGZZ	AC	Bushing, Mains Supply Cord
	LBSHC0053AFZZ	AB			
421	QACCL0001AFZZ	AR	QACCB0052AF09	AM	Mains Supply Cord
	QACCS9001SE00	AG			
	QACCZ0002TA0F	AF			
	QACCZ0052AF00	AP			
	QACCZ0053AF00	AK			
422	QANTW0054AFZZ	AL	Not Used	——	FM Antenna
434	QPLGA0205AGZZ	AK	Not Used	——	Plug, Mains Supply Cord
445	Not Used	——	GCOVH3152AFSA	**	Cover, Voltage Selector
	SPAKC1118AFZZ	**	SPAKC1132AFZZ	**	Packing Case
	SSAKA0101AFZZ	**	Not Used	——	Sack, Mains Supply Cord
	TINSZ0094AFZZ	**	Not Used	——	Operation Manual, Swedish
	TTAGH0030AFZZ	**	Not Used	——	Tag, English/German/French

SHARP Service Manual

SG-500E
SG-500H

APSS
Auto Program Search System

DOLBY SYSTEM ®

* 'Dolby' and the 'Double-D' symbols are trade mark of Dolby Laboratories.
* Manufactured under licence from Dolby Laboratories.

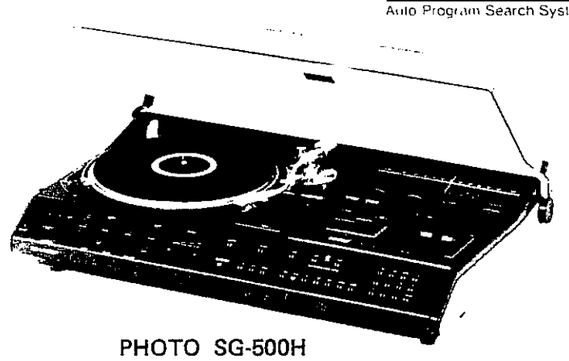

PHOTO SG-500H

MODEL
SG-500H
SG-500E

In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

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SHARP CORPORATION OSAKA, JAPAN

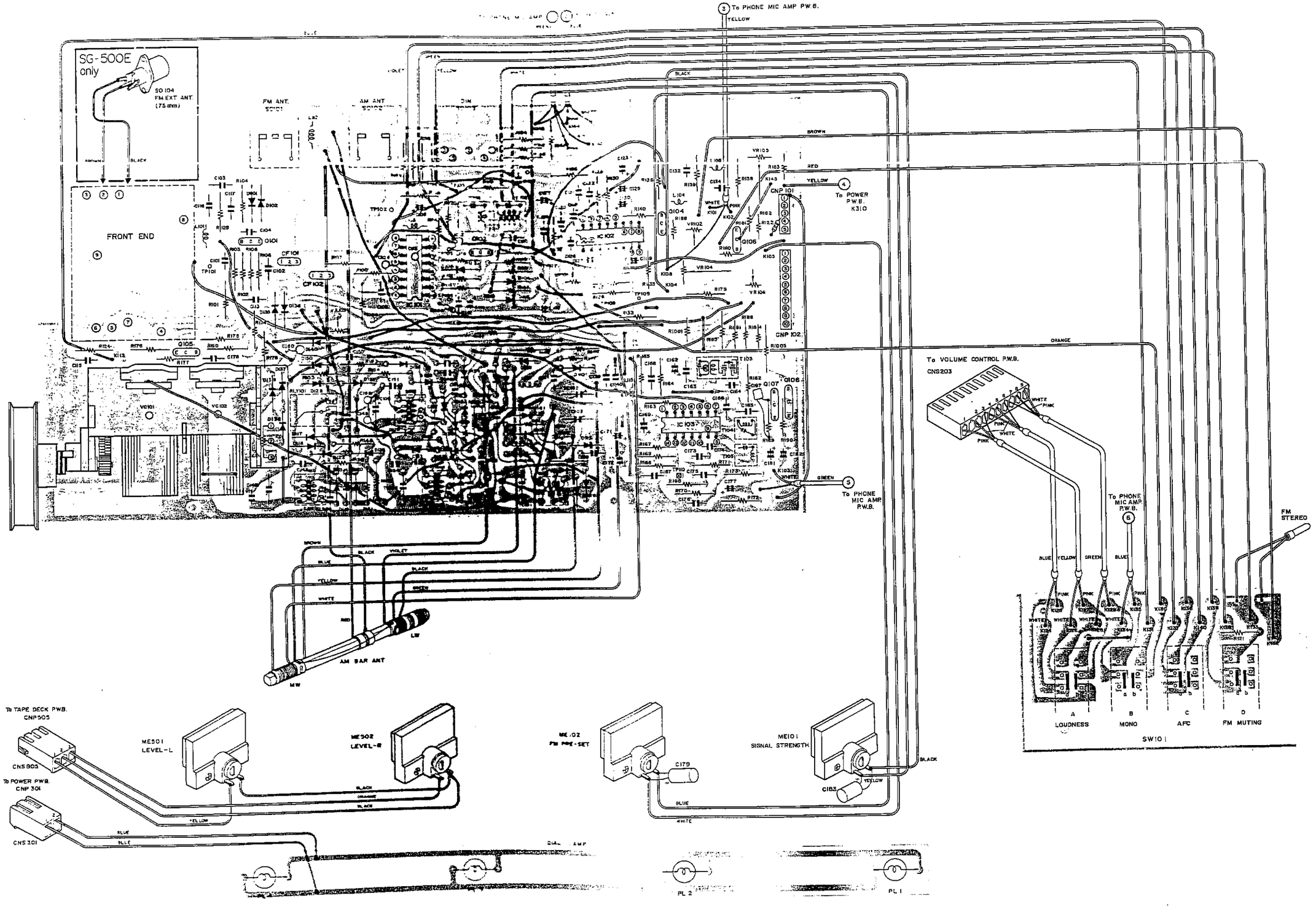


Figure 91–1 WIRING SIDE OF P.W. BOARD (Tuner/Lamp)

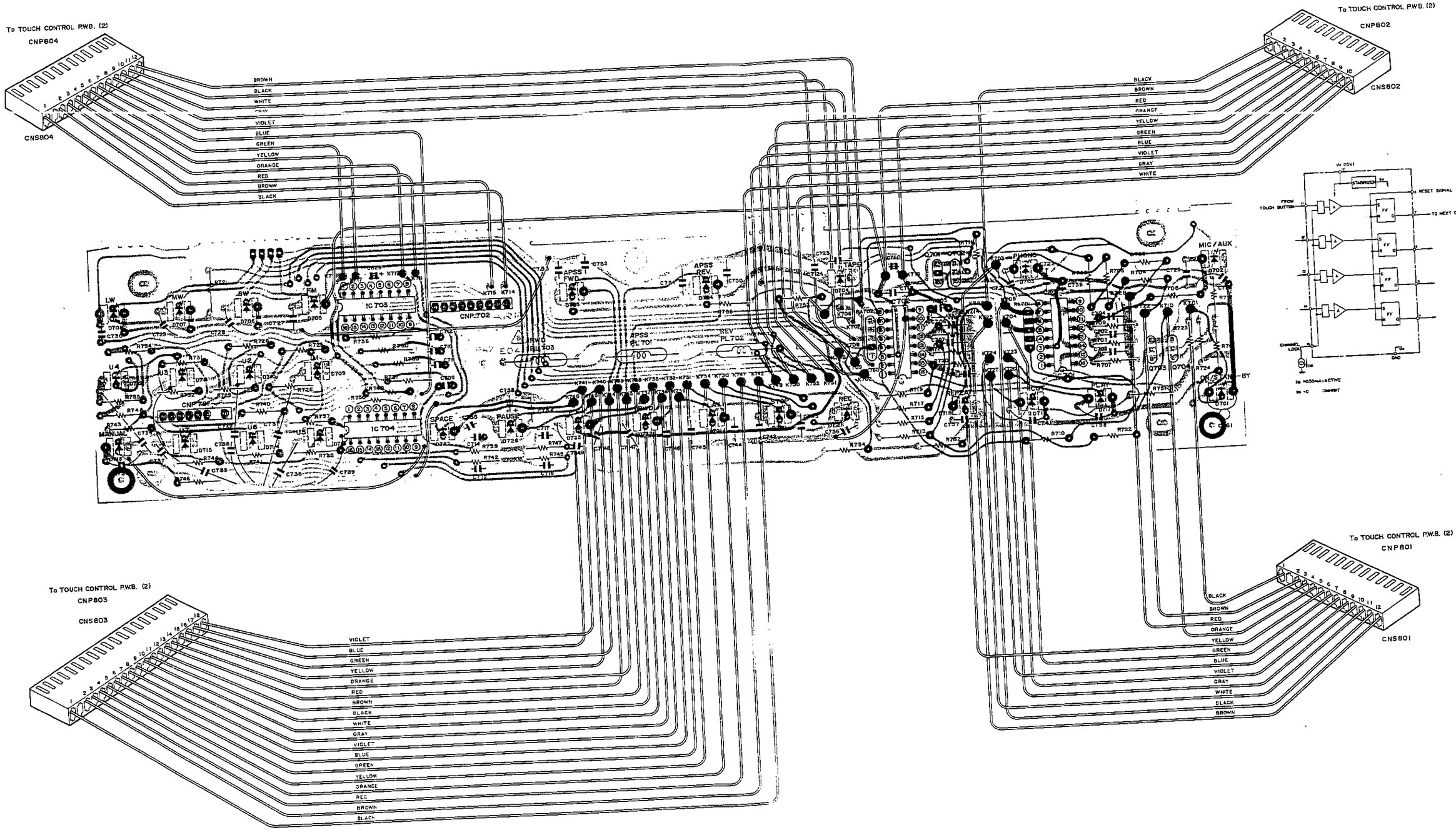
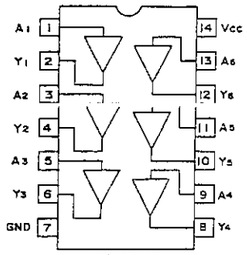
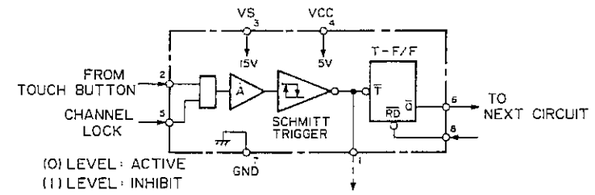
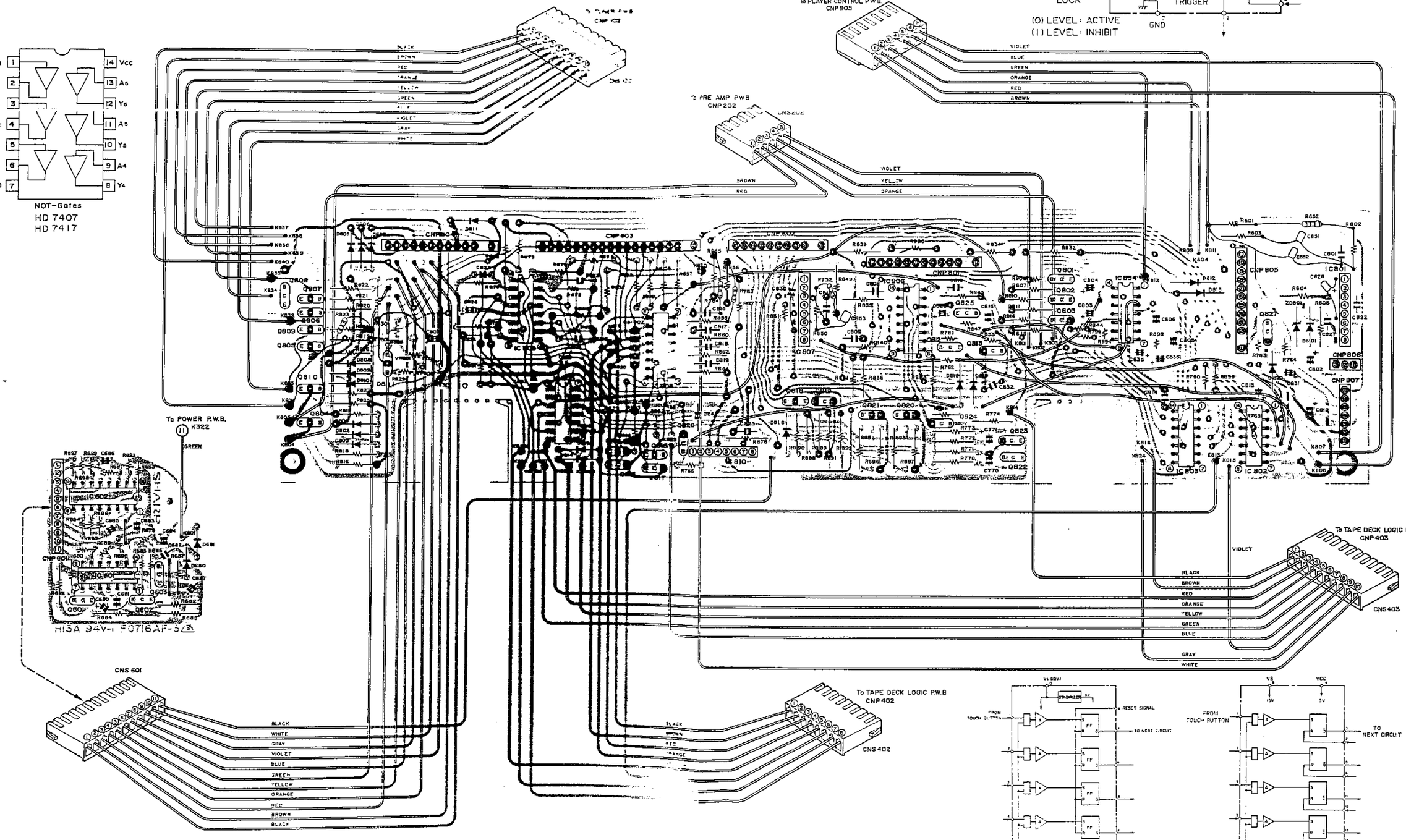


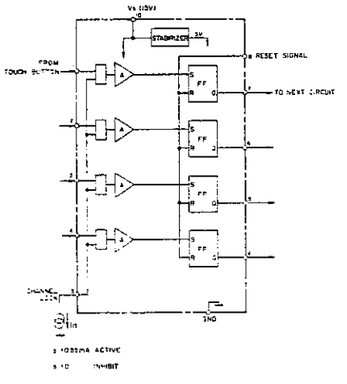
Figure 93–1 WIRING SIDE OF P.W. BOARD (Touch Control 1)



NOT-Gates
HD 7407
HD 7417







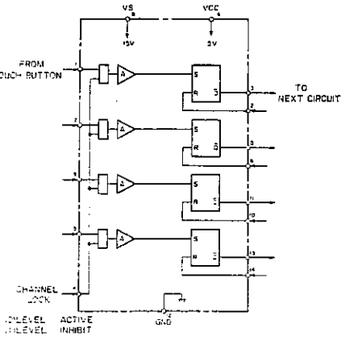


Figure 95–1 WIRING SIDE OF P.W. BOARD (Touch Control 2/Muting Control)

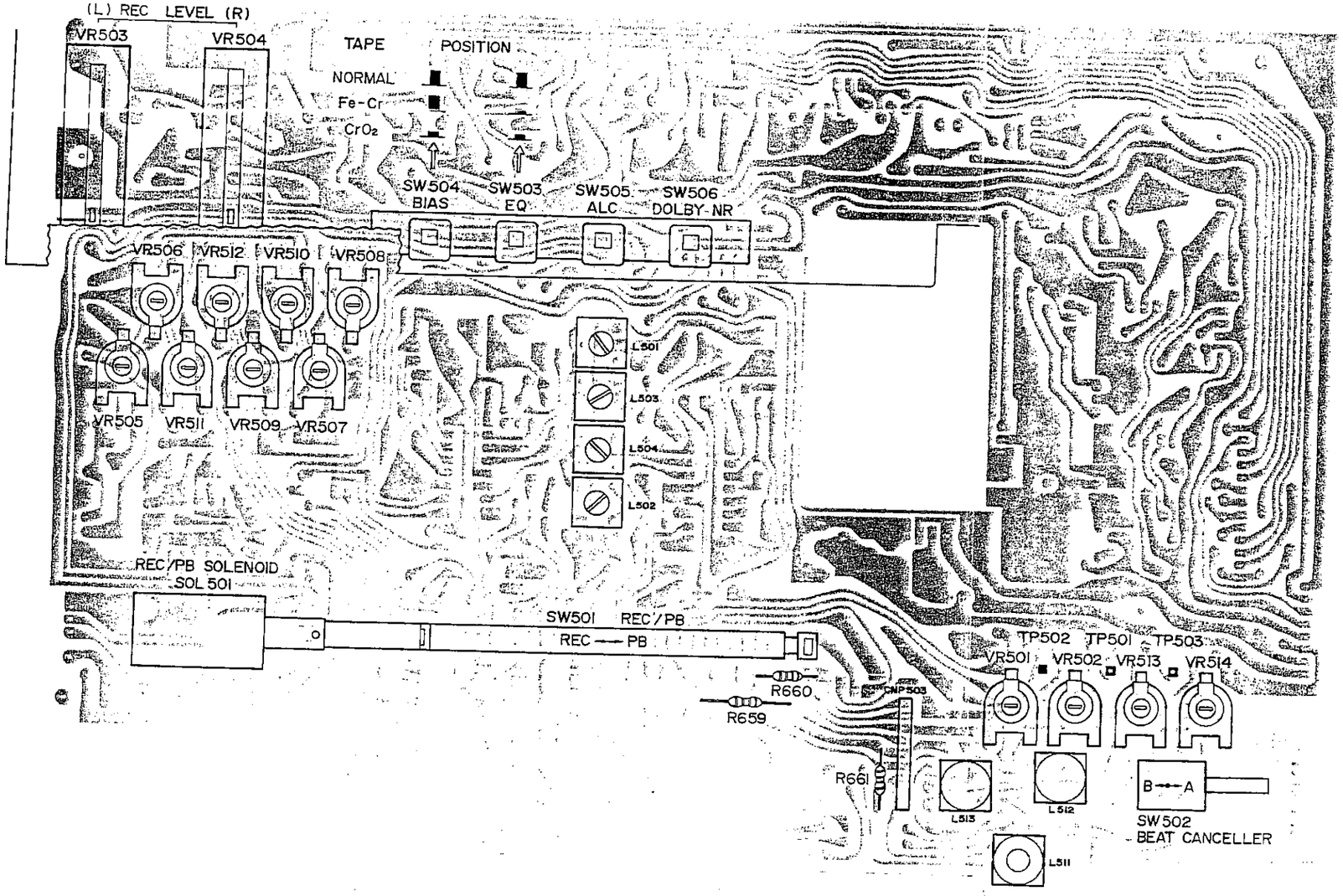
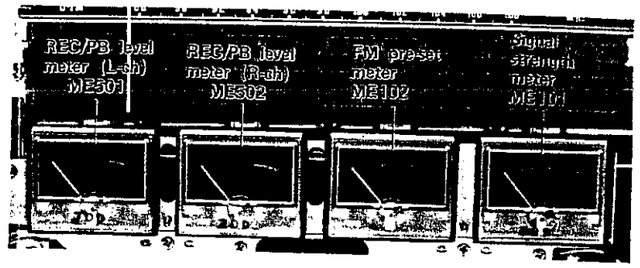


Figure 61–1 ALIGNMENT POINTS (TAPE DECK SECTION)



- PLAYBACK SENSITIVITY ADJUSTMENT

  VR501, VR502 : Playback sensitivity adjust

- LEVEL METER SENSITIVITY ADJUSTMENT

  VR505, VR506 : Level meter sensitivity adjust

- RECORD AMPLIFIER BIAS CURRENT ADJUSTMENT

  VR513, VR514 : Bias adjust

- RECORD AND PLAYBACK SENSITIVITY ADJUSTMENT

  VR507, VR508, VR509, VR510, VR511, VR512 : Overall sensitivity adjust

TAPE	POSITION		Semi-VR	
	BIAS SW SW504	EQ SW SW503	L-ch	R-ch
Normal	▮	▮	VR507	VR508
Fe-Cr	▮	▂	VR509	VR510
CrO_2	▂	▂	VR511	VR512

- AM IF ALIGNMENT POINT

T103 :AM I.F.T. (H;455 kHz, E;465 kHz)
T104 :AM IF trap filter

- AM RF ALIGNMENT POINT

SW
L106 :SW antenna coil
L111 :SW oscillation coil
TC101 :SW antenna trimmer
TC104 :SW oscillation trimmer
MW
L108 :MW antenna coil
L112 :MW oscillation coil
TC102 :MW antenna trimmer
TC105 :MW oscillation trimmer
LW
L109 :LW antenna coil
L113 :LW oscillation coil
TC103 :LW antenna trimmer
TC106 :LW oscillation trimmer

- FM IF ALIGNMENT

IFT :I.F.T. (Front end)
T101 :FM quadrature
T102 :FM quadrature

- FM RF ALIGNMENT

LA :FM antenna coil
LR :FM RF coil
LO :FM oscillation coil
TCA :FM antenna trimmer
TCR :FM RF trimmer
TCO :FM oscillation trimmer
} (Front end)
VR103 :FM low frequency adjust
VR106 :FM high frequency adjust

- FM MPX ALIGNMENT

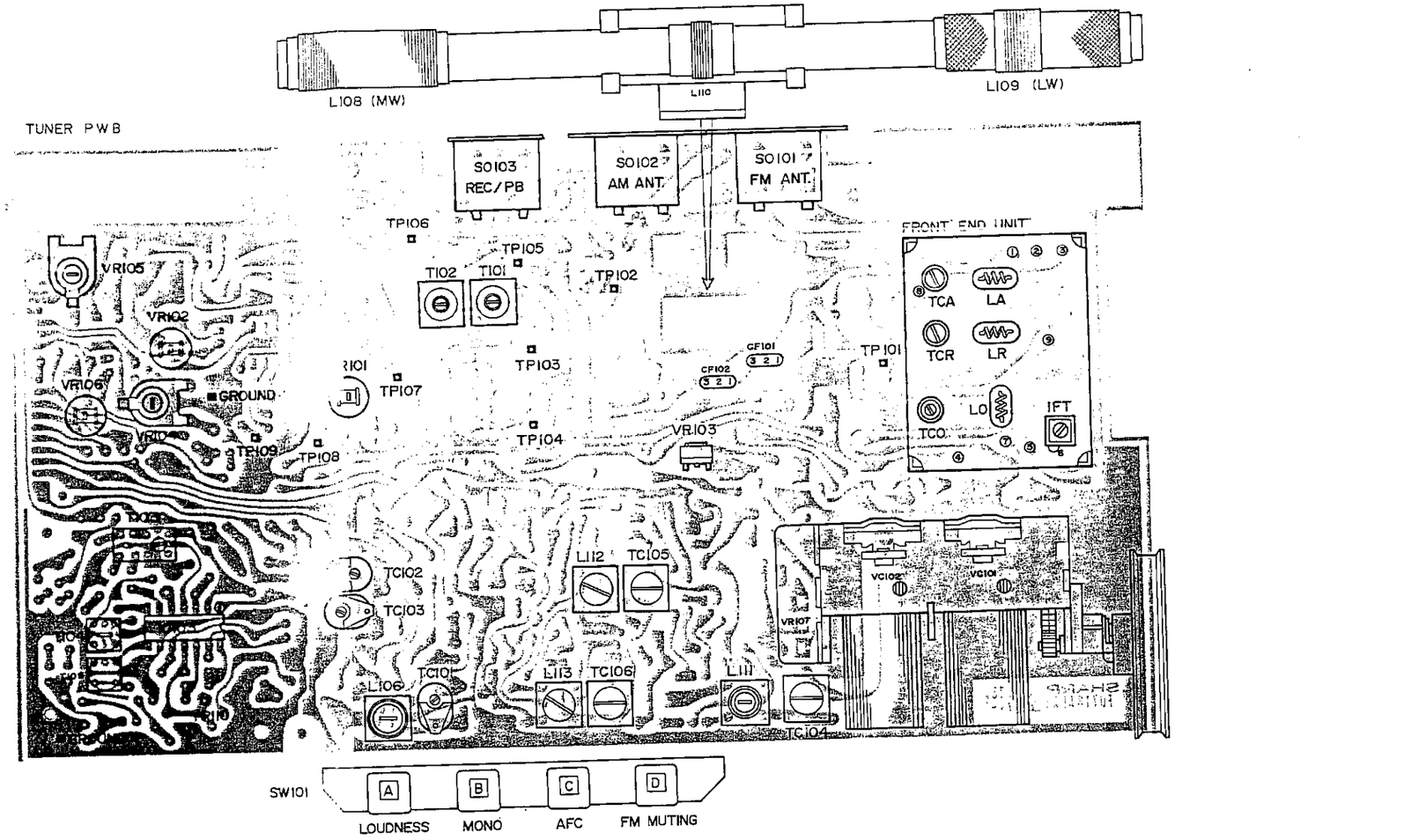
VR101 :FM V.C.O. adjust
VR102 :FM stereo separation adjust

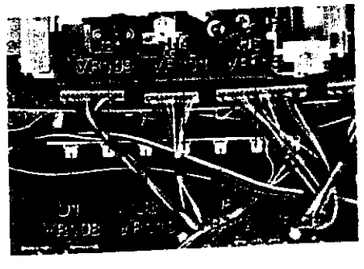
- FM PRE-SET METER ADJUSTMENT

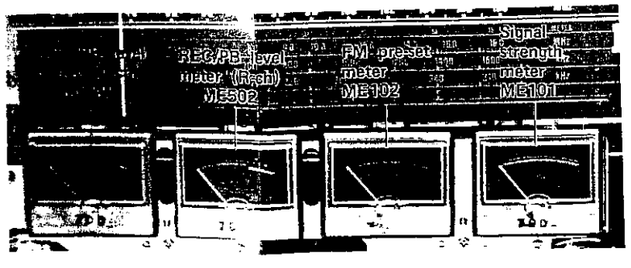
VR104, VR105 :FM pre-set meter adjust
VR108 :U1
VR109 :U2
VR110 :U3
VR111 :U4
VR112 :U5
VR113 :U6
VR114 :U7
} FM pre-set tuning

- FM MUTING ADJUSTMENT

VR801 :FM pre-set muting adjust







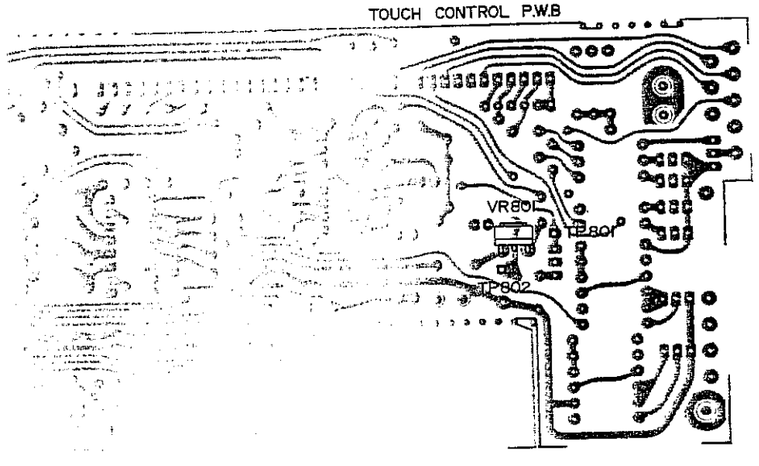
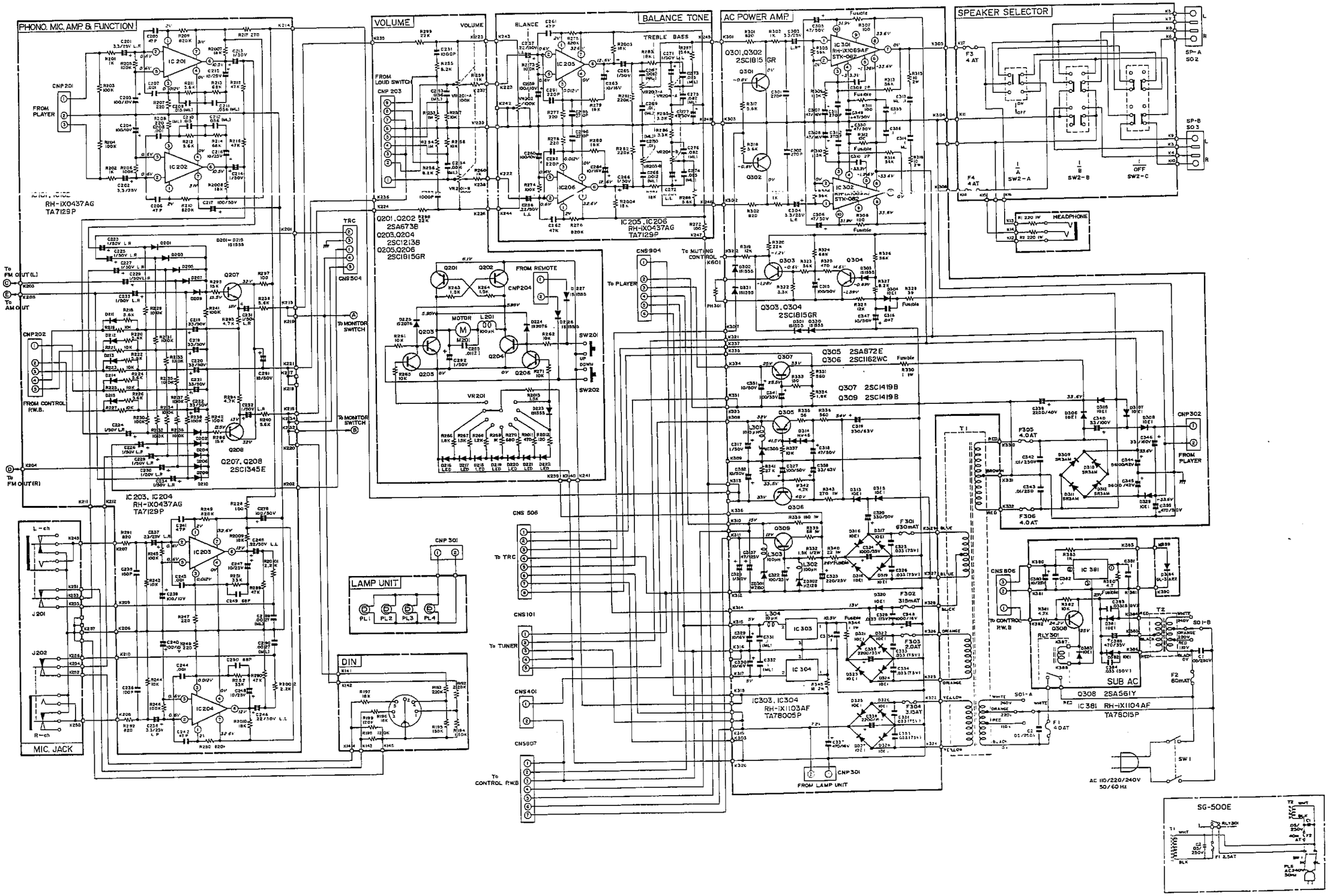
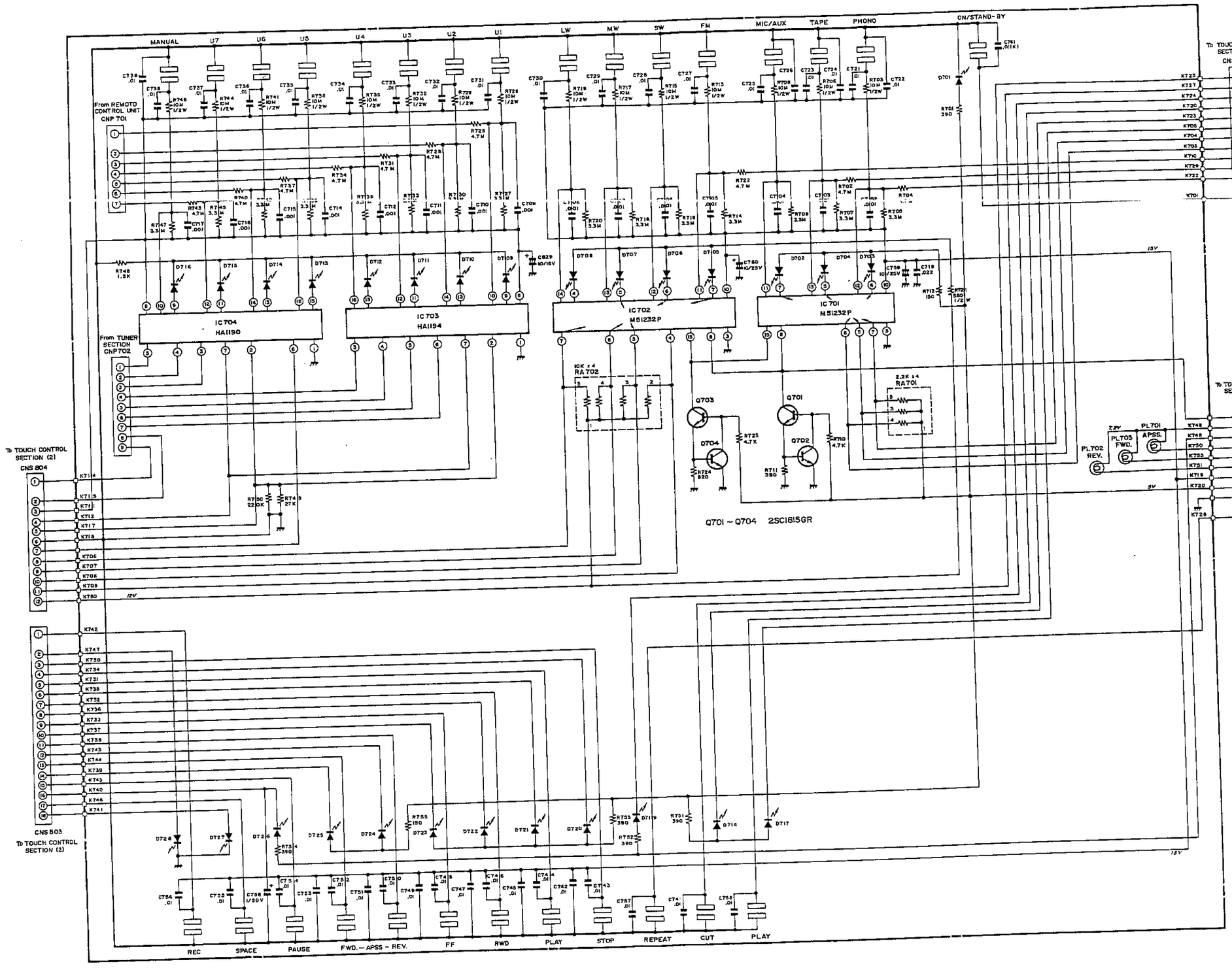


Figure 63–1 ALIGNMENT POINTS (TUNER SECTION)



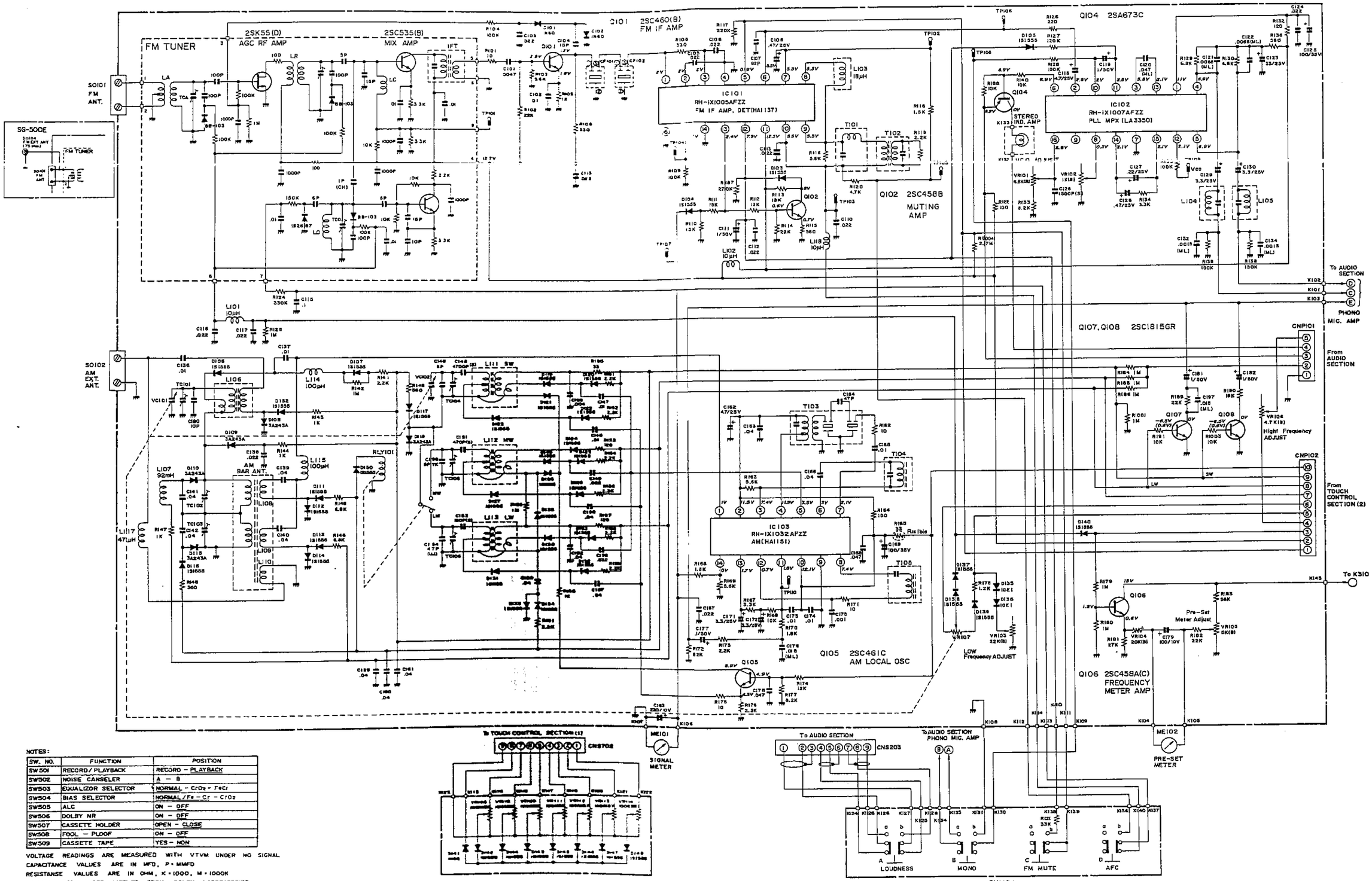
(Specifications of wiring diagrams of this model are subject to change for the improvement without prior notice.)

Figure 69–1 SCHEMATIC DIAGRAM (Audio Section)



(Specifications of wiring diagrams of this model are subject to change for the improvement without prior notice.)

Figure 73–1 SCHEMATIC DIAGRAM (Touch Control Section 1)



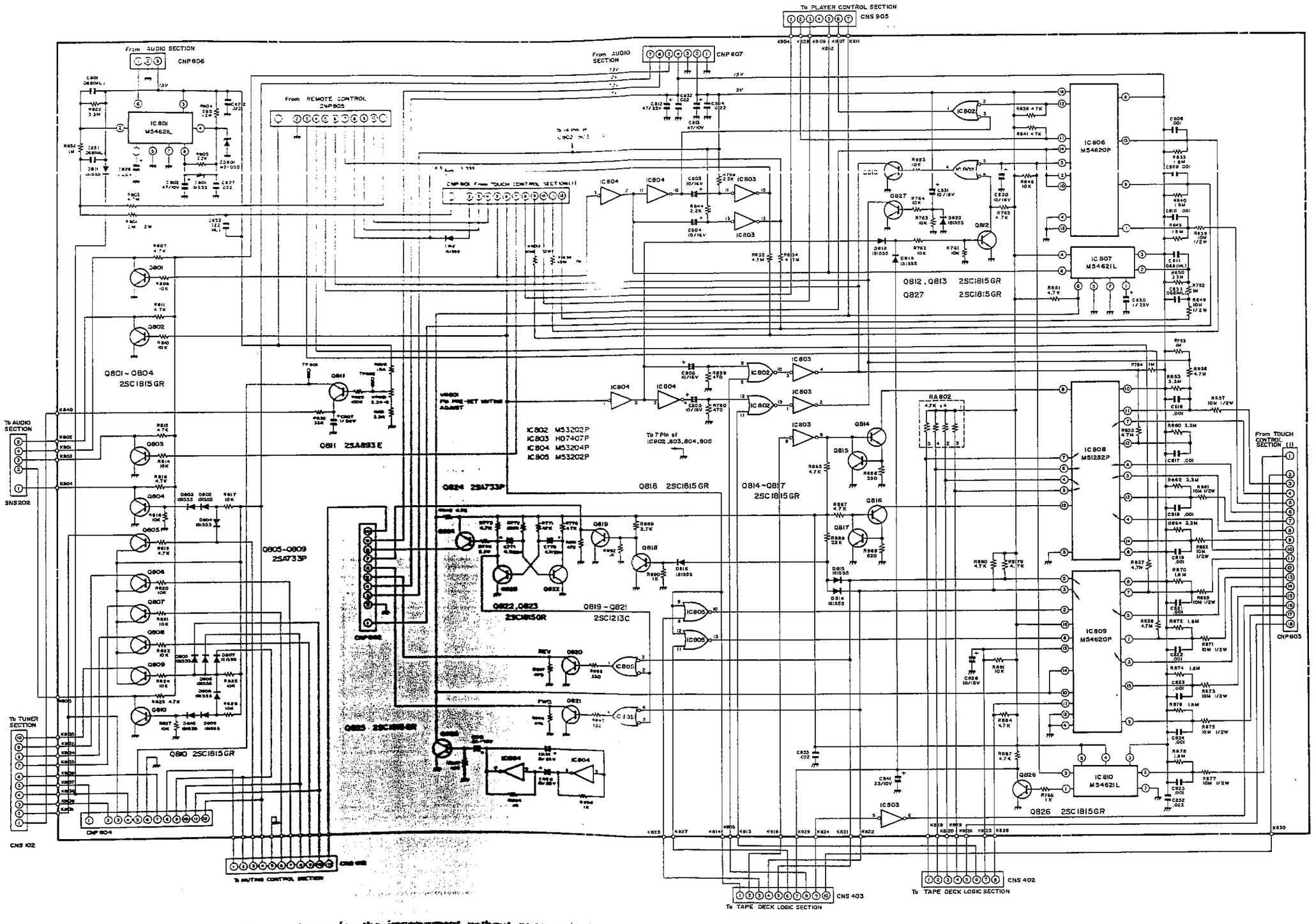
NOTES:

SW. NO.	FUNCTION	POSITION
SW501	RECORD/PLAYBACK	RECORD – PLAYBACK
SW502	NOISE CANSELER	A – B
SW503	EQUALIZER SELECTOR	NORMAL – CrO2 – FeCr
SW504	BIAS SELECTOR	NORMAL/Fe – Cr – CrO2
SW505	ALC	ON – OFF
SW506	DOLBY NR	ON – OFF
SW507	CASSETE HOLDER	OPEN – CLOSE
SW508	FOOL – PLOOF	ON – OFF
SW509	CASSETE TAPE	YES – NON

VOLTAGE READINGS ARE MEASURED WITH VTVM UNDER NO SIGNAL
CAPACITANCE VALUES ARE IN MFD, P = MMFD
RESISTANSE VALUES ARE IN OHM, K = 1000, M = 1000K
MANUFACTURED UNDER LICENCE FROM DOLBY LABORATORIES

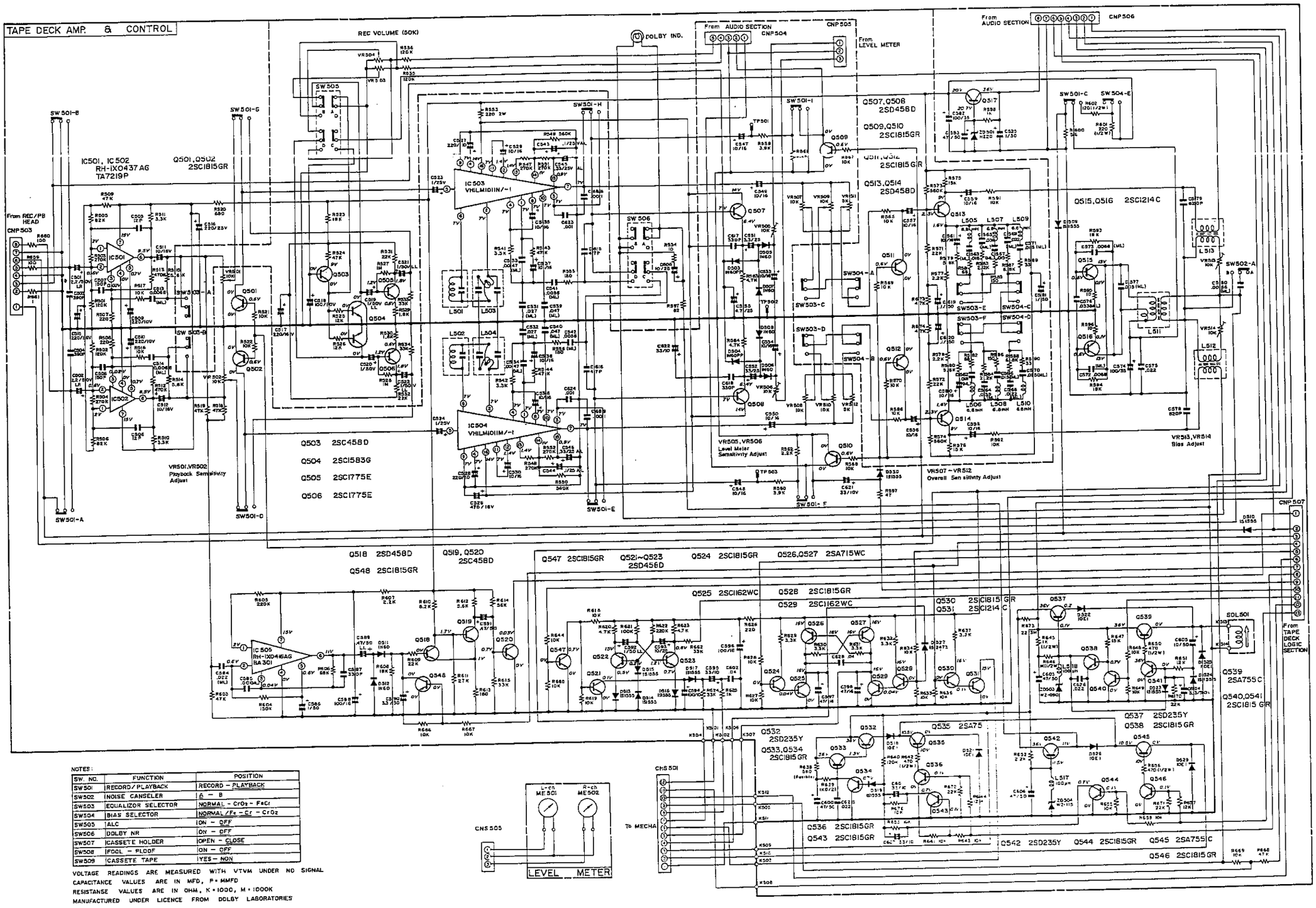
(Specifications of wiring diagrams of this model are subject to change for the improvement without prior notice.)

Figure 71–1 SCHEMATIC DIAGRAM (Tuner Section)



(Specifications of wiring diagrams of this model are subject to change for the improvement without prior notice.)

Figure 75–1 SCHEMATIC DIAGRAM (Touch Control Section 2)

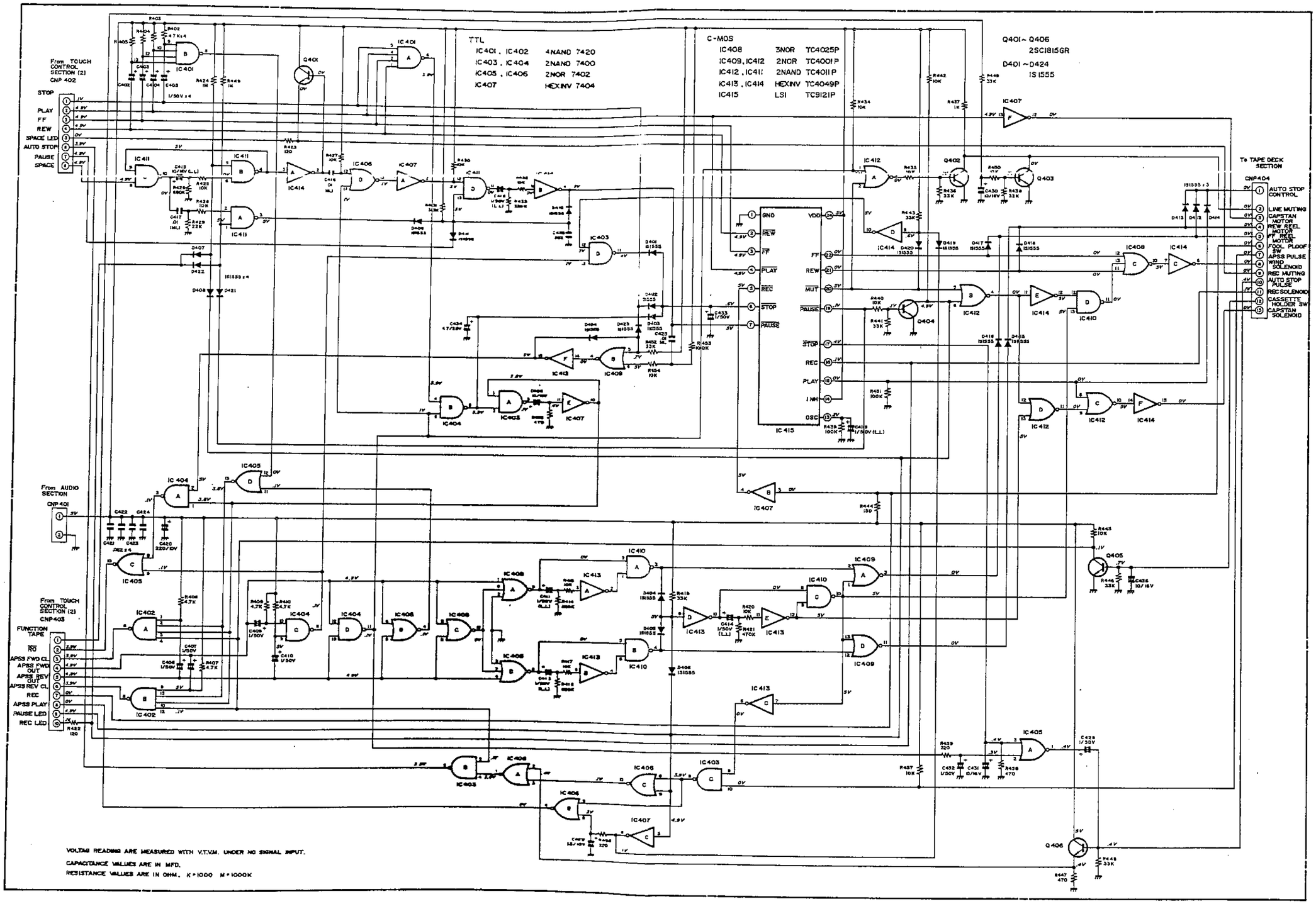


SW. NO.	FUNCTION	POSITION
SW501	RECORD / PLAYBACK	RECORD – PLAYBACK
SW502	NOISE CANSELER	A – B
SW503	EQUALIZOR SELECTOR	NORMAL – CrO₂ – FeCr
SW504	BIAS SELECTOR	NORMAL / Fe – Cr – CrO₂
SW505	ALC	ON – OFF
SW506	DOLBY NR	ON – OFF
SW507	CASSETTE HOLDER	OPEN – CLOSE
SW508	FOOL – PROOF	ON – OFF
SW509	CASSETTE TAPE	YES – NON

VOLTAGE READINGS ARE MEASURED WITH VTVM UNDER NO SIGNAL
CAPACITANCE VALUES ARE IN MFD, P = MMFD
RESISTANSE VALUES ARE IN OHM, K = 1000, M = 1000K
MANUFACTURED UNDER LICENCE FROM DOLBY LABORATORIES

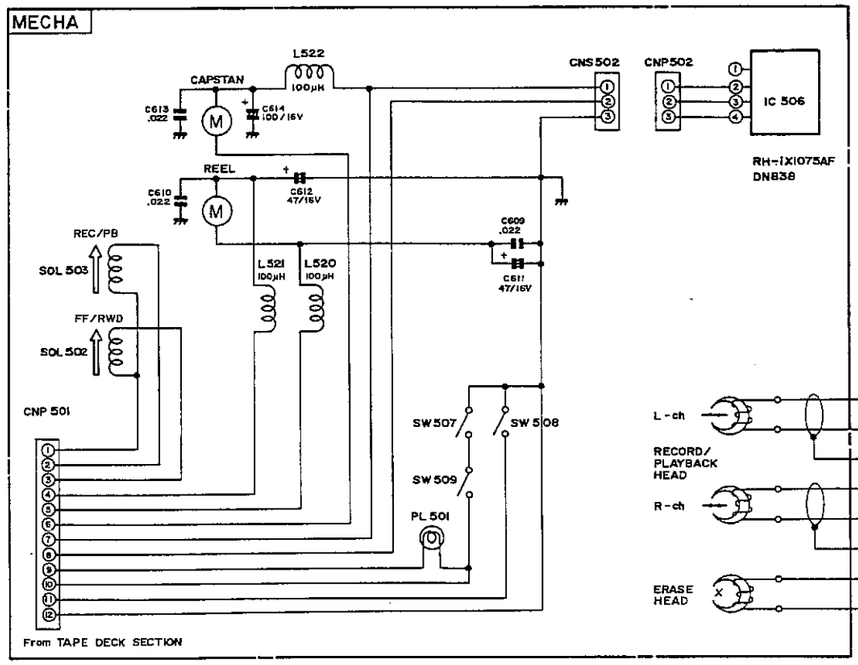
(Specifications of wiring diagrams of this model are subject to change for the improvement without prior notice.)

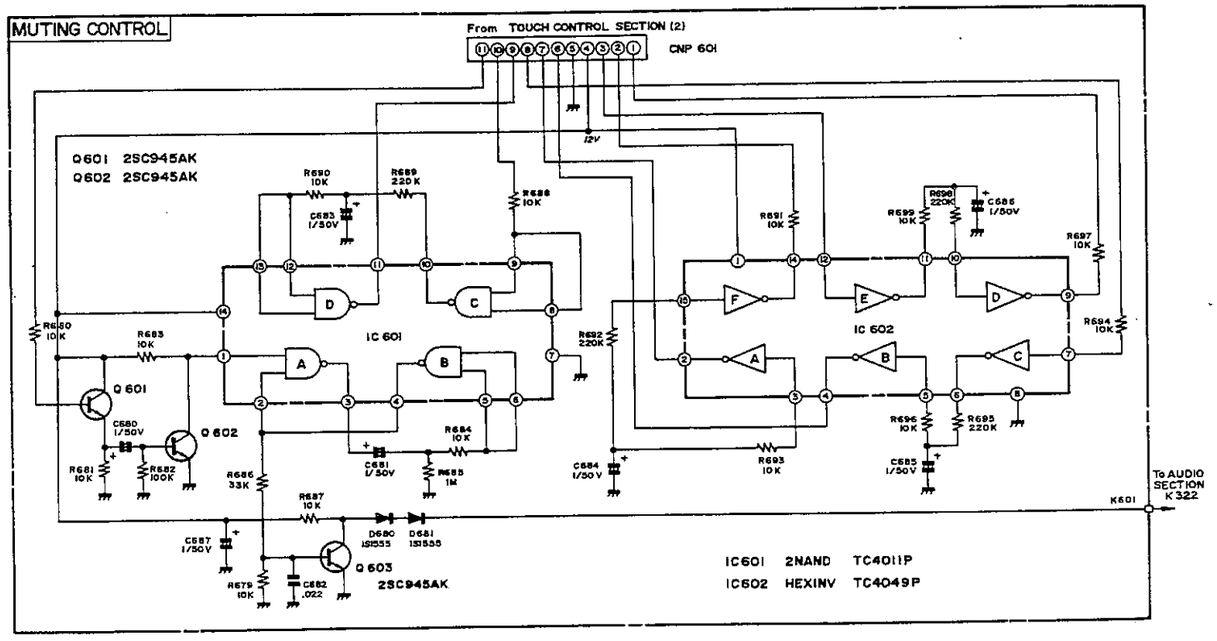
Figure 77–1 SCHEMATIC DIAGRAM (Tape Deck Section)



(Specifications of wiring diagrams of this model are subject to change for the improvement without prior notice.)

Figure 79–1 SCHEMATIC DIAGRAM (Tape Deck Logic Section)

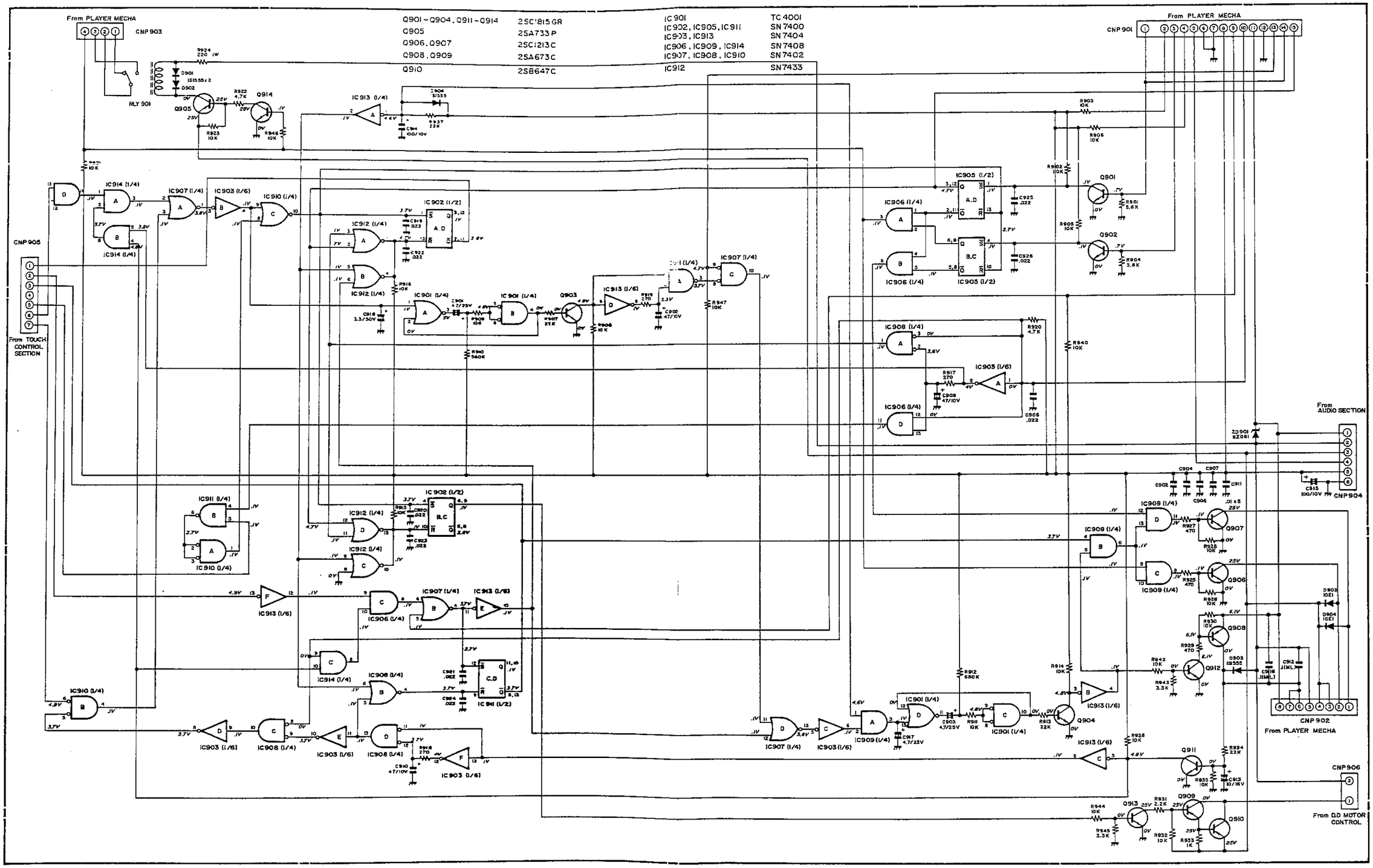




(Specifications of wiring diagrams of this model are subject to change for the improvement without prior notice.)

Figure 81–1 SCHEMATIC DIAGRAM (Tape Deck Mechanism/Muting Control Section)

Q901 ~ Q904, Q911 ~ Q914	2SC1815GR	IC 901	TC 4001
Q905	2SA733P	IC 902, IC 905, IC 911	SN 7400
Q906, Q907	2SC1213C	IC 903, IC 913	SN 7404
Q908, Q909	2SA673C	IC 906, IC 909, IC 914	SN 7408
Q910	2SB647C	IC 907, IC 908, IC 910	SN 7402
		IC 912	SN 7433



(Specifications of wiring diagrams of this model are subject to change for the improvement without prior notice.)

Figure 83–1 SCHEMATIC DIAGRAM (Player Control Section)

X31, X32: 2SA641 or 2SA842 or 2SA564

X33~X38: 2SC945 or 2SC733 or 2SC1815 or 2SC828

X39: 2SA641 or 2SA842 or 2SA564

X40: 2SC945 or 2SC733 or 2SC1815 or 2SC828

X41: 2SB605 or 2SA684 or 2SA886

X42~X45: 2SA733 or 2SC561

X46~X49: 2SC945 or 2SC733 or 2SC1815 or 2SC828

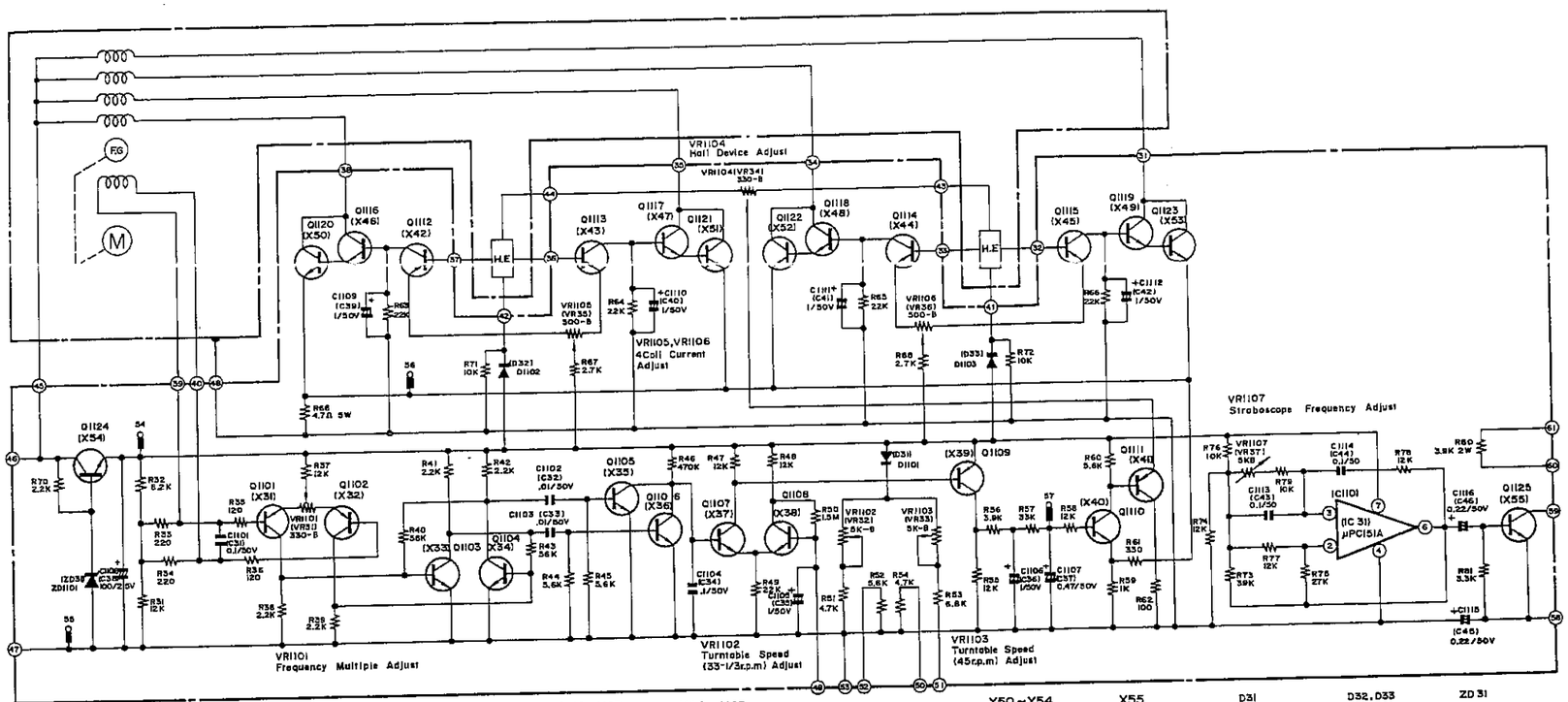
X50~X54: 2SC1449L

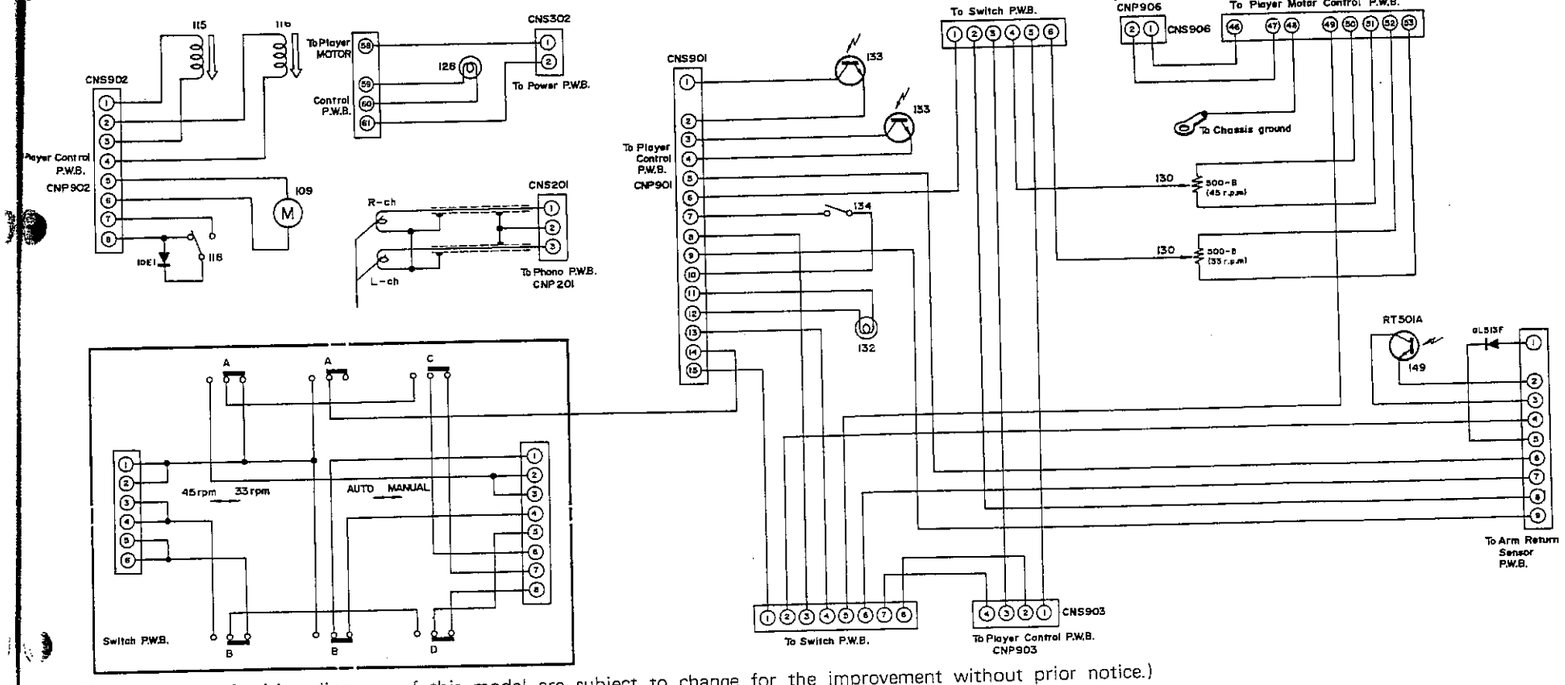
X55: 2SC1573

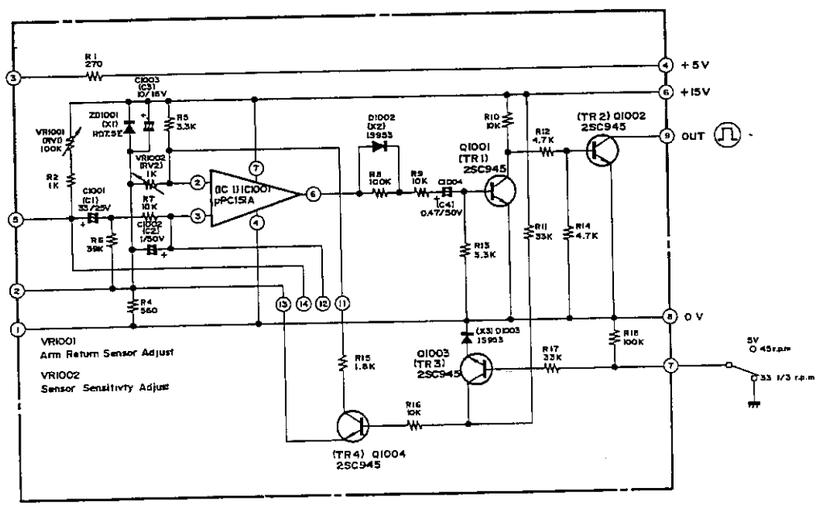
D31: MV 12

D32, D33: IS953 or ISS 53 or MA150 or IS1555

ZD 31: RD13E(B)

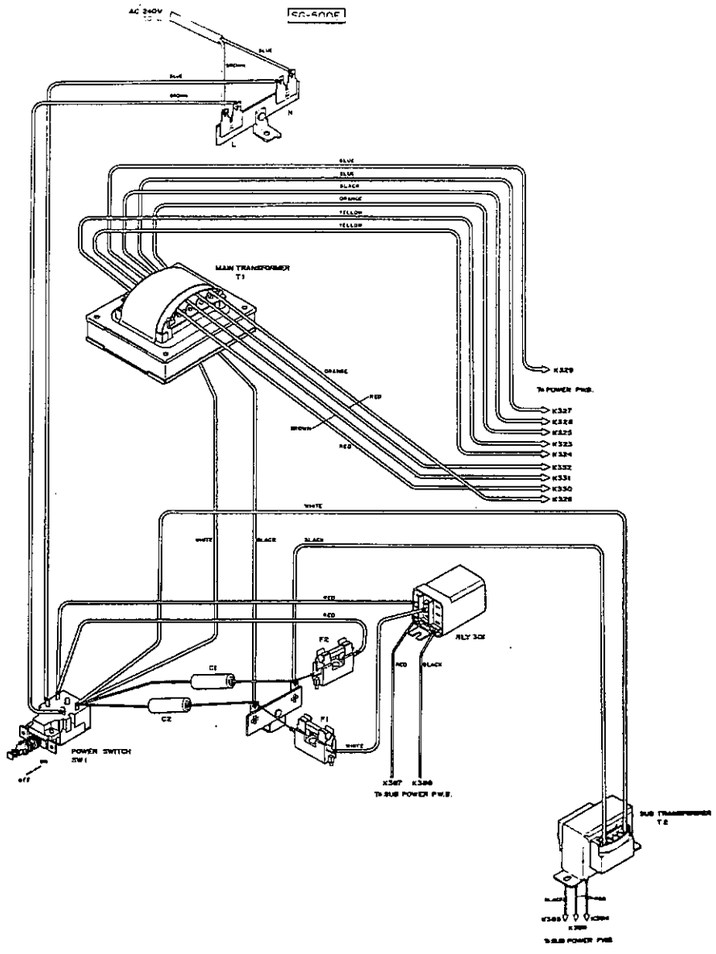






(Specifications of wiring diagrams of this model are subject to change for the improvement without prior notice.)

Figure 85–1 SCHEMATIC DIAGRAM (Player Motor Control/Arm Return Sensor/Player Mechanism Section)



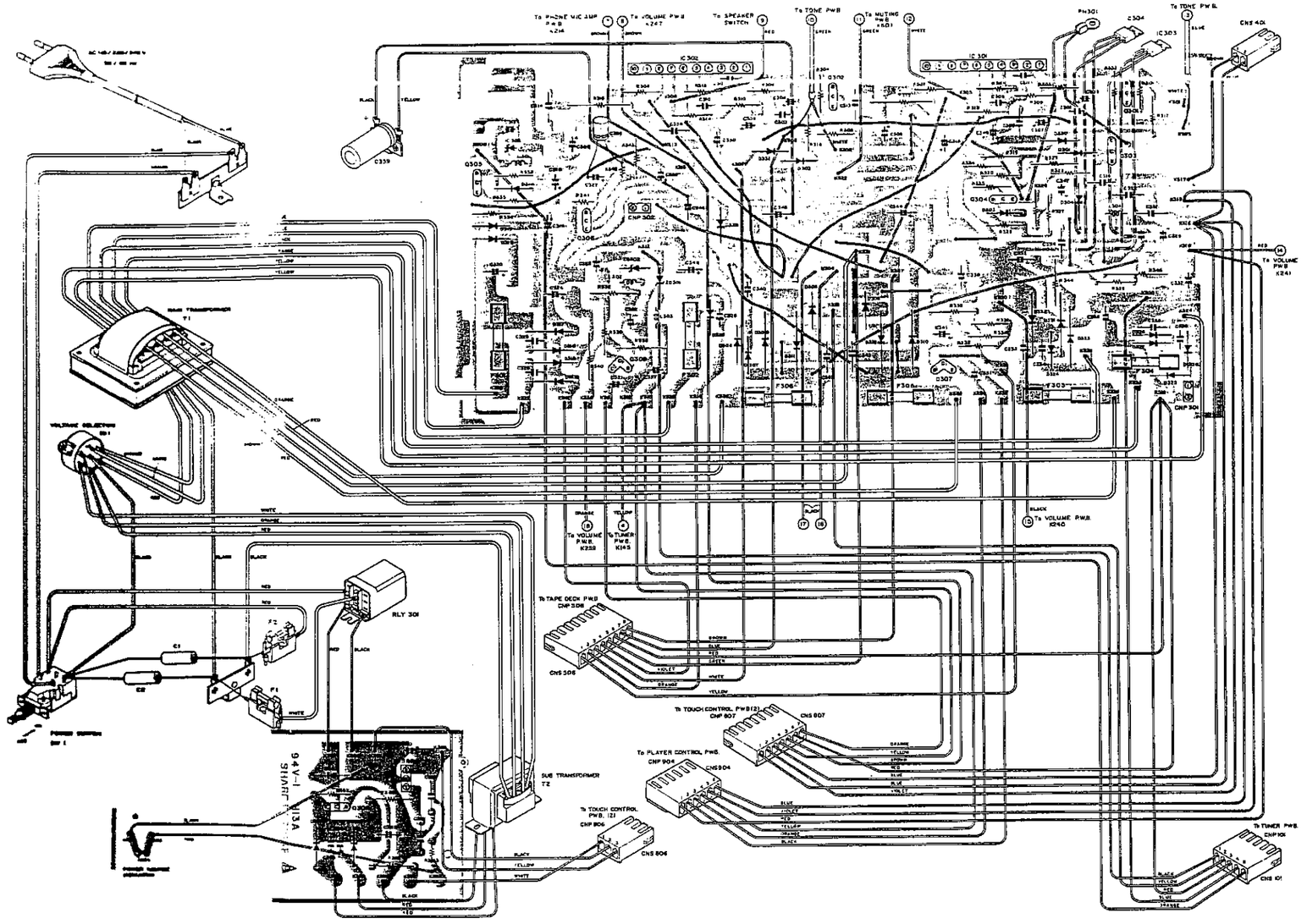


Figure 87–1 WIRING SIDE OF P.W. BOARD (Power/Sub-Power)

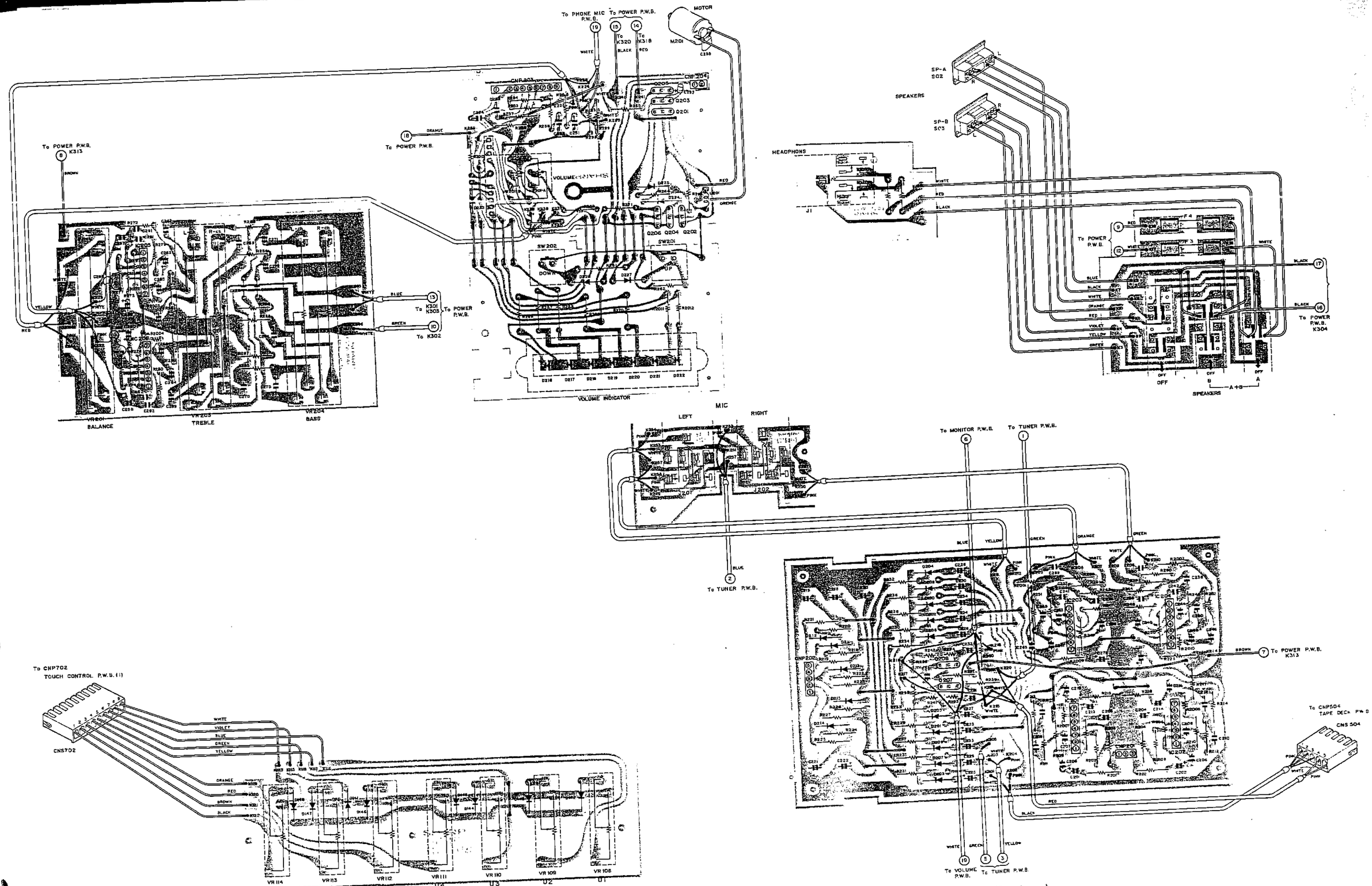


Figure 89–1 WIRING SIDE OF P.W. BOARD (Volume Control/Tone/FM Pre-set/Speakers Selector/Headphone/MIC/Pre-Amp.)

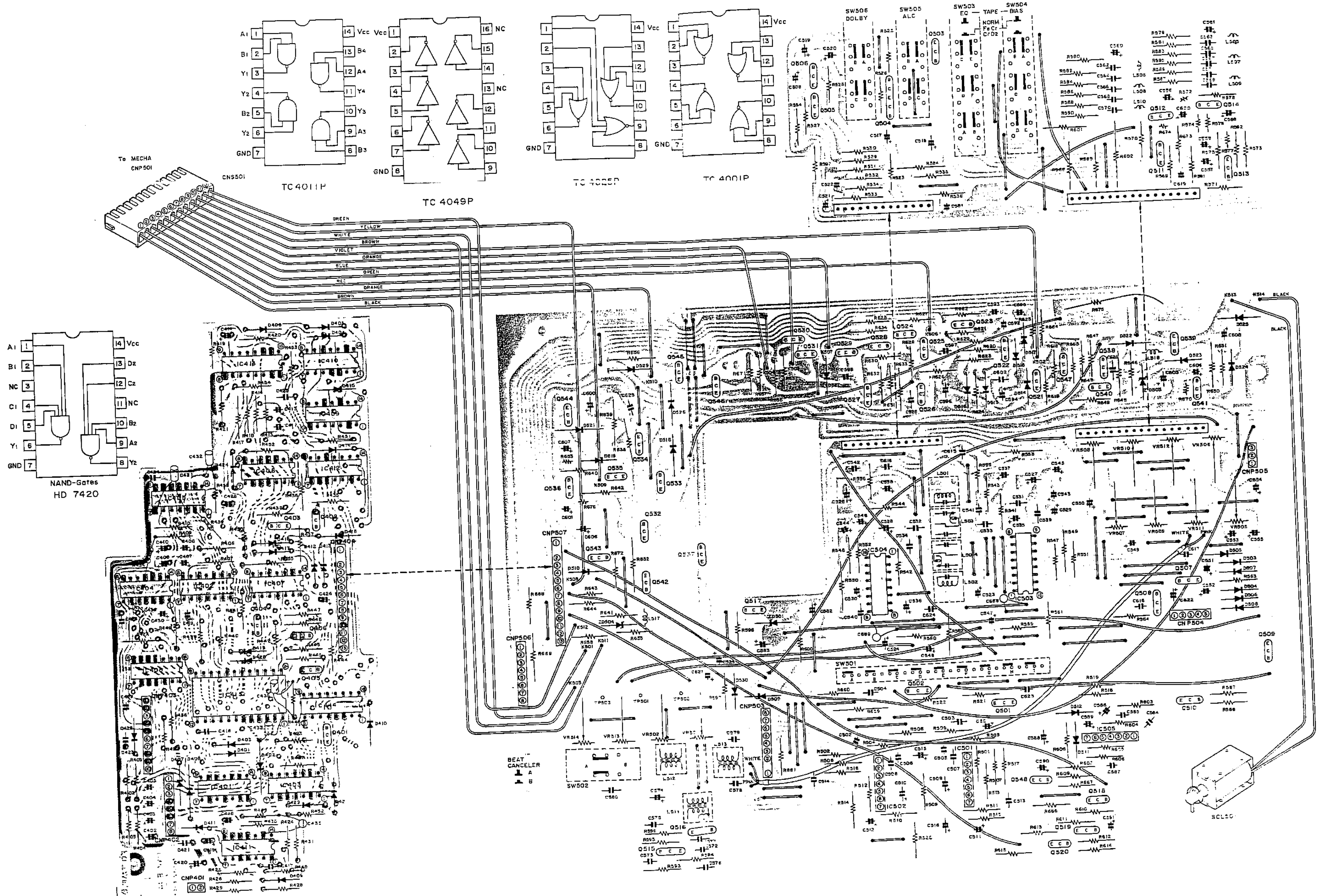
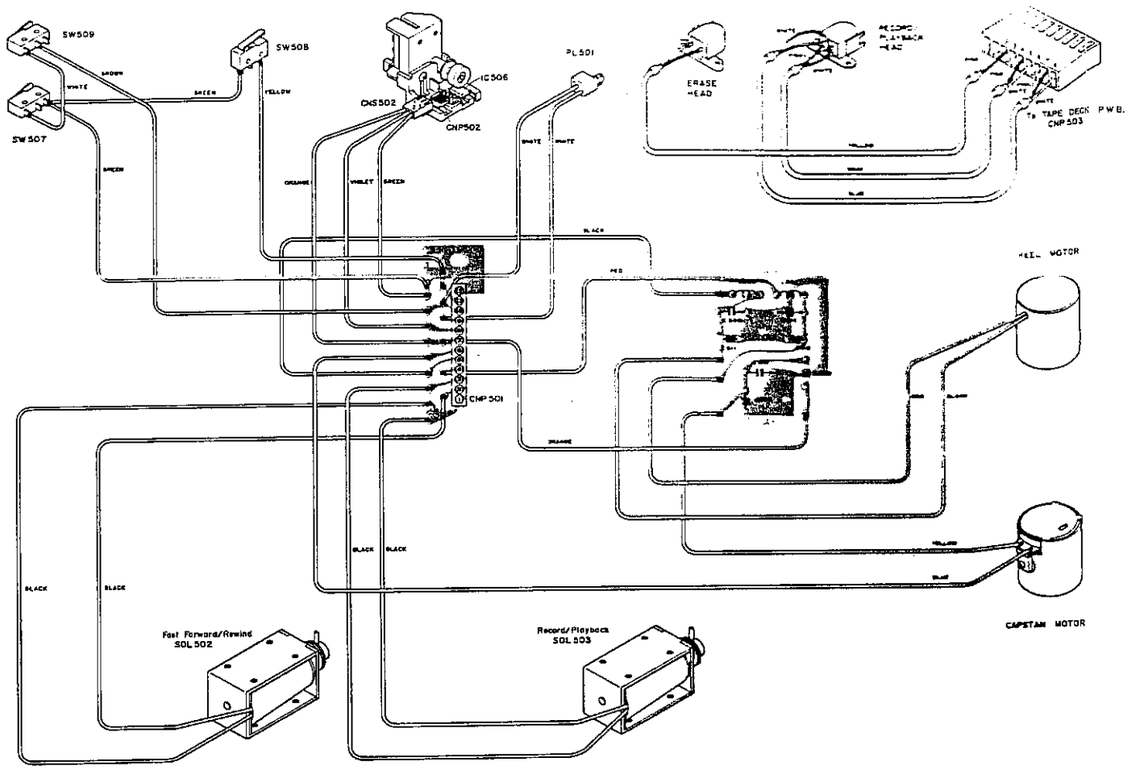
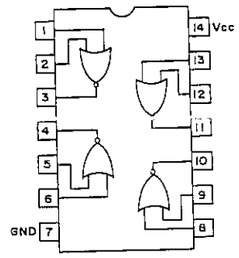
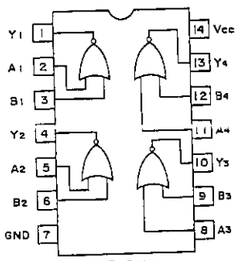

TC4011P
TC 4049P
TC 4025P
TC 4001P
NAND-Gates
HD 7420
To MECHA CNP501
CN5501
GREEN
YELLOW
WHITE
BROWN
VIOLET
ORANGE
BLUE
GREEN
RED
ORANGE
BROWN
BLACK
SW506 DOLBY
SW505 ALC
SW503 EQ — TAPE — SW504 BIAS
NORM
FeCr
CrO2
BEAT CANCELER
SW502
SW501
CNP507
CNP506
CNP503
CNP504
CNP505
CNP401
CNP402
SCL501

Figure 97–1 WIRING SIDE OF P.W. BOARD (Tape Deck Logic/Tape Deck)

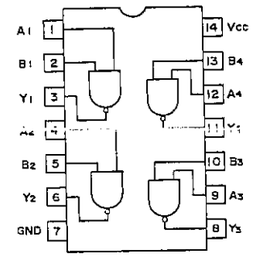




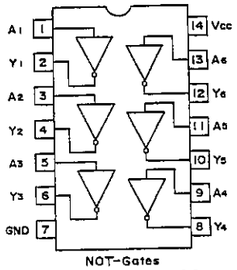
TC 4001P



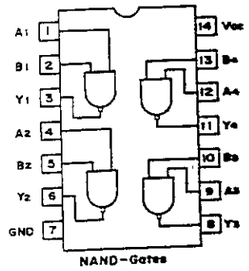
NOR-Gates
HD 7402
SN 7403
SN 7433



AND-Gates
SN,HD 7408
HD 7409



NOT-Gates
HD 7404 · HD 7406
HD 7405 · HD 7416
SN 7404 · SN 7406



NAND-Gates
HD 7400
HD 7403
SN 7400

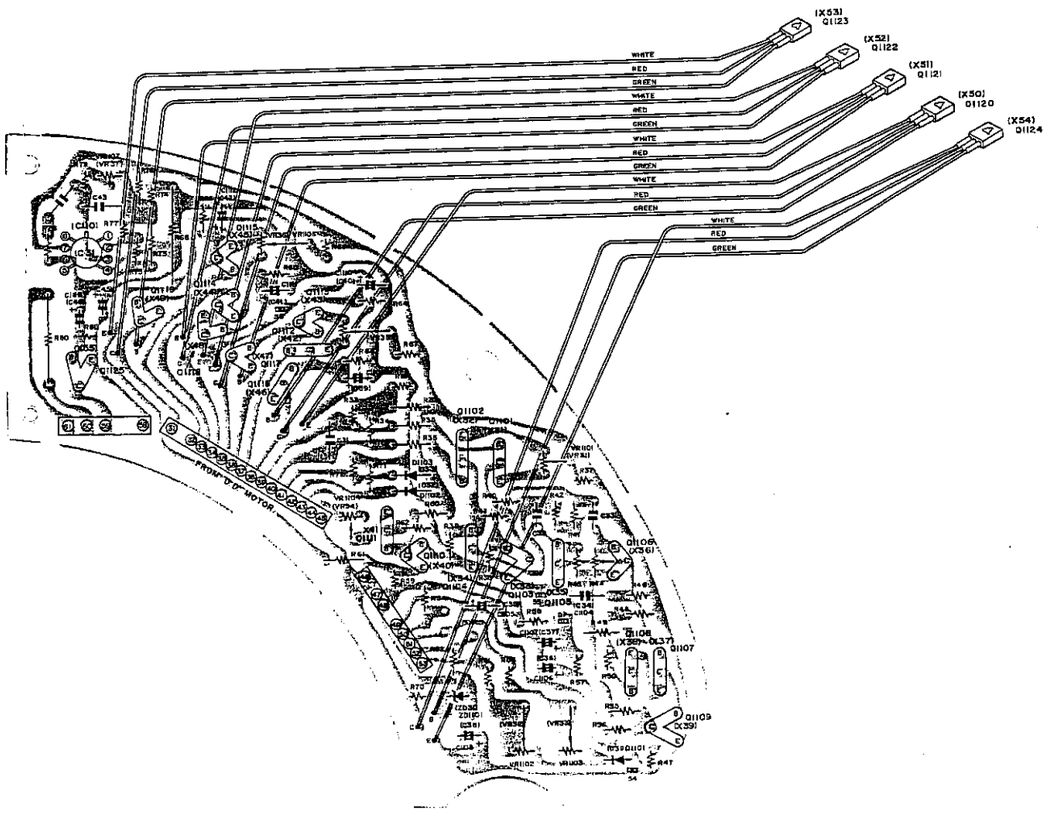


Figure 99—1 WIRING SIDE OF P.W. BOARD (Tape Deck Mechanism/Player Motor Control)

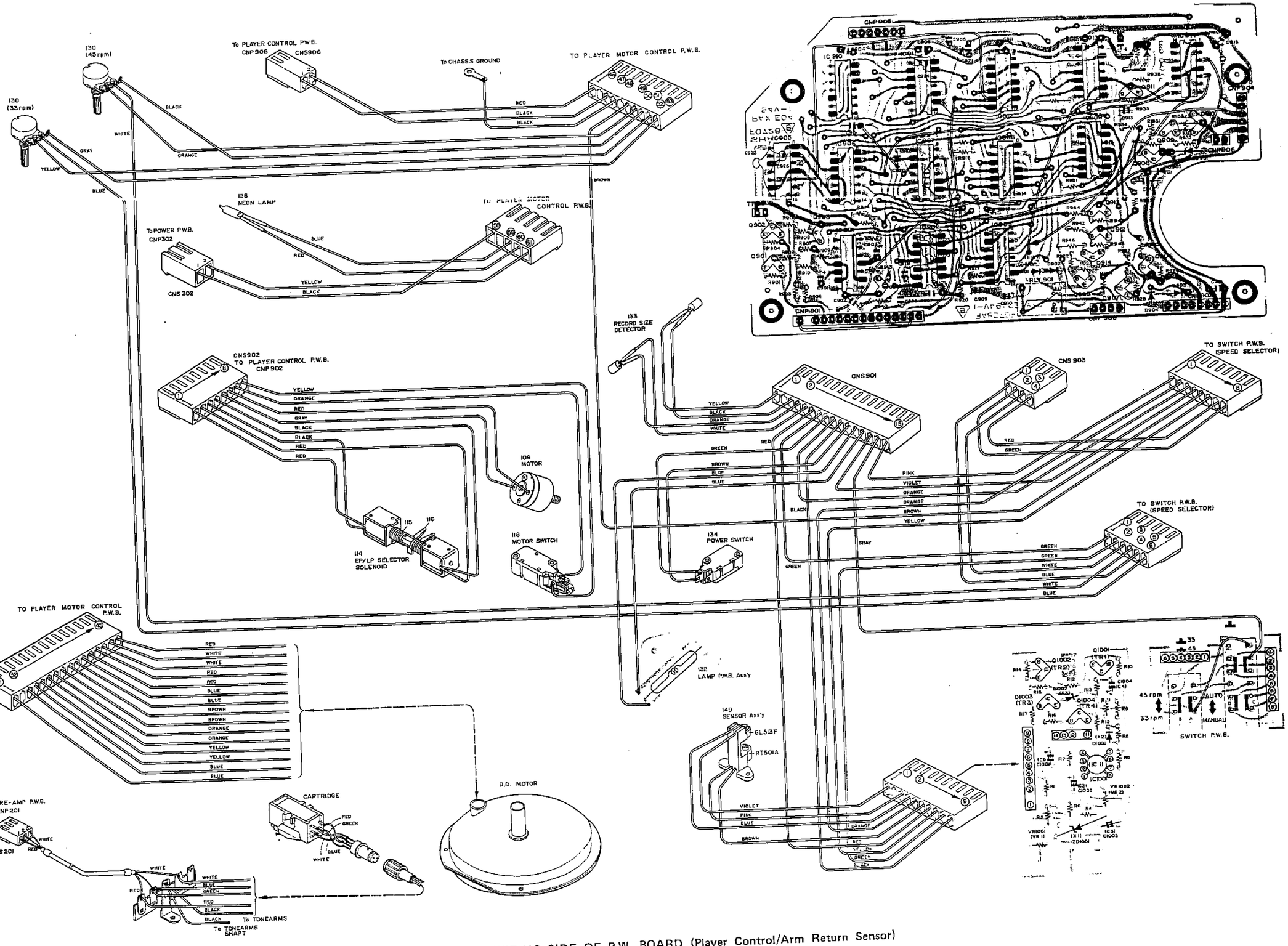


Figure 101—1 WIRING SIDE OF P.W. BOARD (Player Control/Arm Return Sensor)

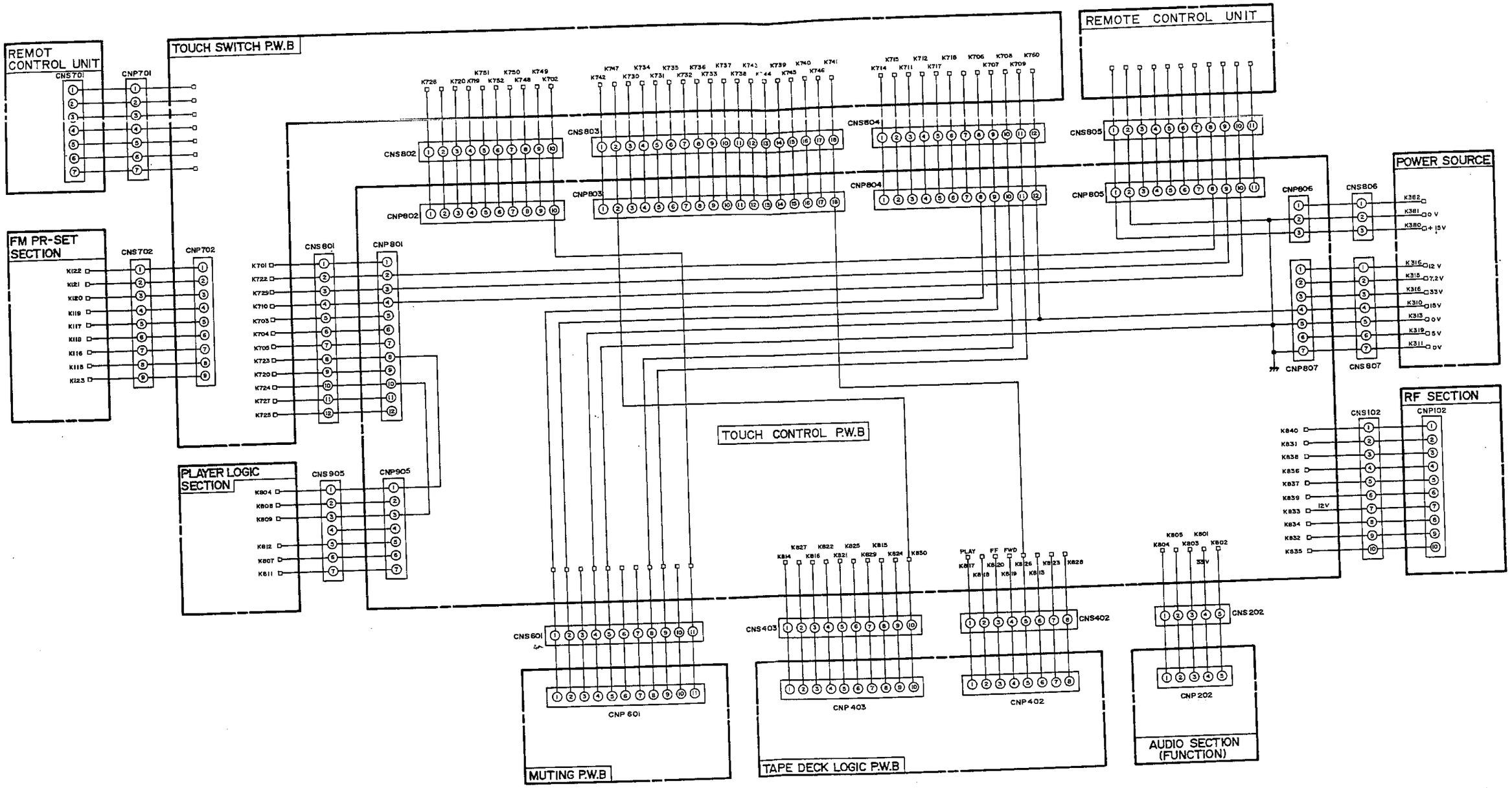


Figure 129–1 CONNECTION GUIDE

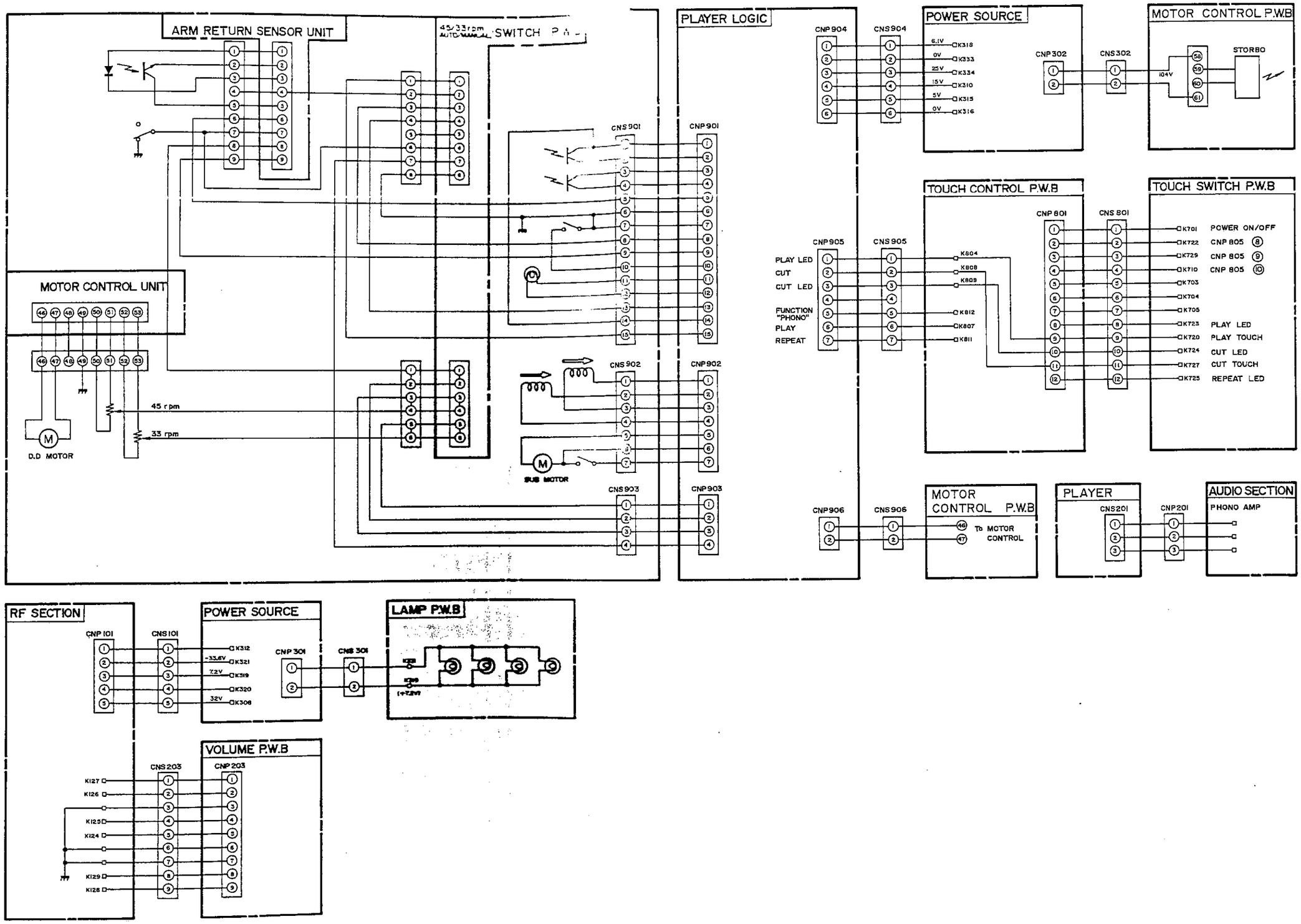


Figure 131–1 CONNECTION GUIDE

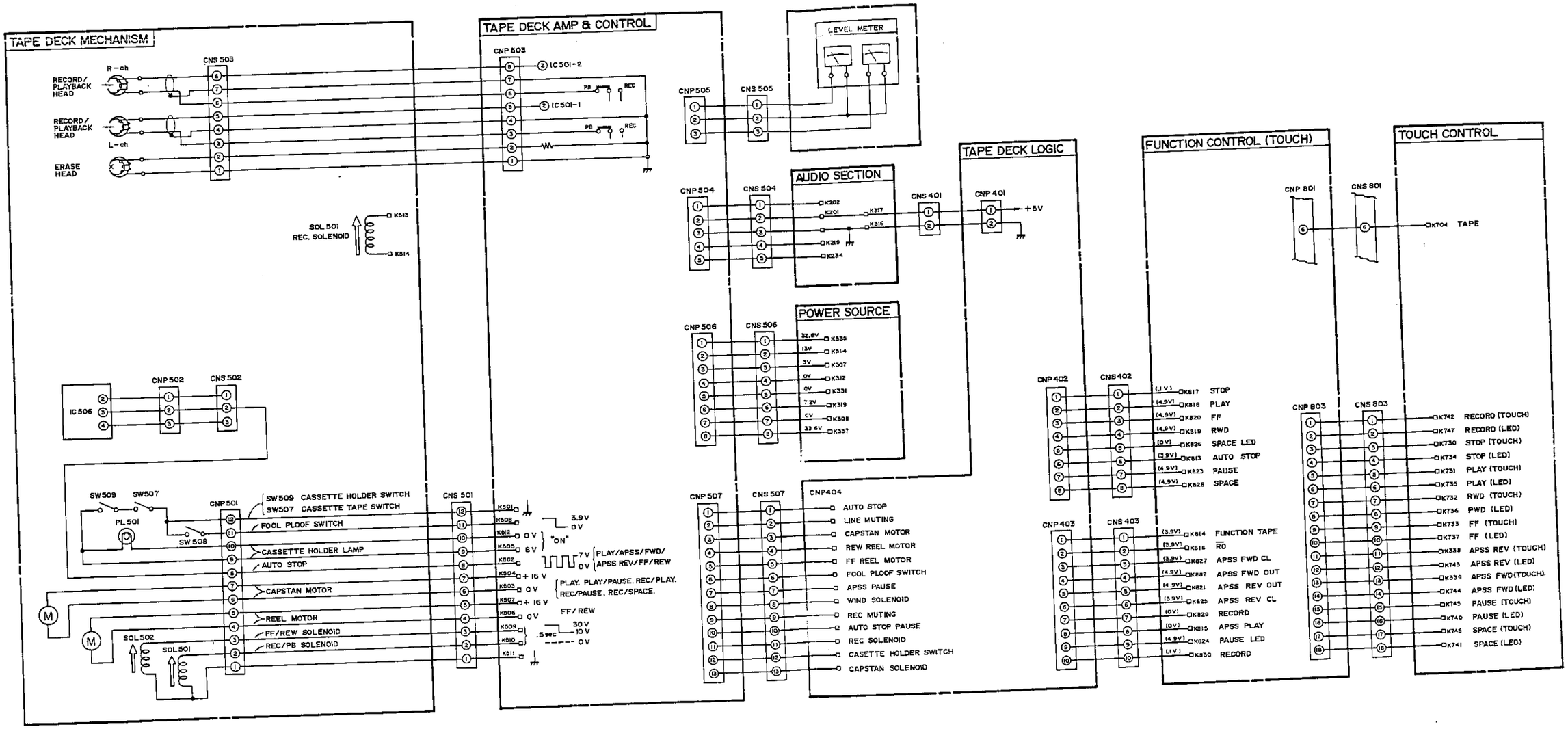


Figure 133–1 CONNECTION GUIDE